

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: CRANE et al. )  
Application No.: ) Group Art Unit: n/a  
Filed: February 27, 2004 ) Examiner: n/a

For: MOTOR DISCONNECT ARRANGEMENT FOR A VARIABLE SPEED DRIVE

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

SIR:

The following are included with this Information Disclosure Statement:

- [X] A. PTO/SB/08**
- [ ] B. CERTIFICATION**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- [ ] C. \$180.00 FEE PAYMENT**  
(37 C.F.R. 1.97(c)-before final Office Action or allowance)
- [ ] D. \$180.00 PETITION, CERTIFICATION & PETITION FEE PAYMENT**  
(37 C.F.R. 1.97(d)-before issue fee payment)

The following are submitted in the above-identified application in compliance with 37 CFR 1.98:

- [ ] I.** A copy of each listed U.S. Patent and U.S. Patent application publication [1.98(a)(2)(i)].
- [X] II.** A copy of each listed foreign patent and/or published foreign patent application. For each listed foreign patent and/or published foreign patent application [1.98(a)(2)]:
  - [X] a)** the English language version or an English translation if not published in English, if available (see PTO-1449)[1.98(a)(3)]; and/or

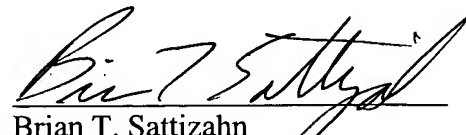
- ☐ (b) U.S. counterpart patents or English language equivalents of the foreign patents or published foreign patent applications (see PTO-1449); and/or
  - ☐ (c) a concise explanation of the relevance of the listed patents, publications or other information (see PTO-1449, foreign search report or other, attached), as it is presently understood by the person signing this disclosure, since no English translation is currently available[1.98(a)(3)].
- ☒ III. A copy of each listed publication, other than published foreign applications. For each listed publication [1.98(a)(2)]:
- ☐ (a) an English translation, if available, when the original publication is not in the English language (see PTO-1449)[1.98(a)(3)];
  - ☐ (b) a concise explanation of the listed publications (see PTO-1449), as it is presently understood by the person signing this disclosure, since no English translation is currently available [1.98(a)(3)].
- ☐ IV. For any other listed information, a copy of the information or that portion which caused it to be listed (see PTO-1449)[1.98(a)(2)(iii)].
- ☐ V. Each listed U.S. Patent, Publication or other information that was previously cited by or submitted to the Office in a prior application, which application is relied upon for an earlier filing date under 35 U.S.C. § 120 [1.98(d)].
- ☒ VI. Copies of each listed U.S. Patent and U.S. Patent application publication are not being submitted herewith pursuant to a waiver of 37 CFR 1.98(a)(2)(i) by the USPTO on July 11, 2003 for applications filed after June 30, 2003.

This information is submitted in the above-identified application in compliance with 37 C.F.R. 1.97 because:

- ☒ 1. This information disclosure is submitted within three months of the filing date of the application, or before the mailing date of the first office action on the merits of the application [1.97(b)].
- ☐ 2. This information disclosure is submitted before the mailing date of a final action in this application under 1.113[1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).
- ☐ 3. This information disclosure is submitted before the mailing date of a notice of allowance under 1.311 [1.97(c)] and the requisite statement or fee is provided (see items 6 or 7 below).

- ☐ 4. This information disclosure is submitted after the mailing date of a final action under 1.113 [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 5. This information disclosure is submitted after the mailing date of a notice of allowance under 1.311, but before the payment of the issue fee [1.97(d)] and the requisite statement and fee is provided (see items 6 and 8 below).
- ☐ 6. This information disclosure statement is submitted with the statement required for items 2, 3, 4 or 5 above [1.97(c), (d), (e)]:
- ☐ I, \_\_\_\_\_, hereby state the following:
- ☐ **Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.**
- ☐ **No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing this certification after making reasonable inquiry, no item of information contained in this information disclosure was known to any individual designated in 1.56(c) more than three months prior to the filing of this information disclosure statement.**
- ☐ 7. This information disclosure statement is submitted with the fee of \$180 set forth in 1.17(p) [see items 2 and 3 above]. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059. (Please note, no fee is required for items 2 and 3 above if the Item 6 statement is provided).
- ☐ 8. Please charge this fee and any other fees associated with this application to Deposit Account No. 50-1059.

Respectfully submitted,

  
Brian T. Sattizahn  
Reg. No. 46,401

<sup>1</sup> Substitute for form 1449A/PTO**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

**Complete if Known**

Application Number	
Filing Date	February 27, 2004
First Named Inventor	CRANE et al.
Art Unit	n/a
Examiner Name	n/a
Attorney Docket Number	20712-0090

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	A	US-6,579,067 B1	06-17-2003	Holden	
	B	US- 6,459,606 B1	10-01-2002	Jadric	
	C	US- 6,459,596 B1	10-01-2002	Corzine	
	D	US- 6,434,960 B1	08-20-2002	Rousseau	
	E	US- 6,408,645 B1	06-25-2002	Tsboe et al.	
	F	US- 6,370,888 B1	04-16-2002	Grabon	
	G	US- 6,325,142 B1	12-04-2001	Bosley et al.	
	H	US- 6,229,722 B1	05-08-2001	Ichikawa et al.	
	I	US- 6,185,946 B1	02-13-2001	Hartman	
	J	US- 6,124,697	09-26-2000	Wilkerson	
	K	US- 6,031,738	02-29-2000	Lipo et al.	
	L	US- 6,018,957	02-01-2000	Katra et al.	
	M	US- 6,008,616	12-28-1999	Nagayama et al.	
	N	US- 5,845,509	12-08-1998	Shaw et al.	
	O	US- 5,528,114	06-18-1996	Tokizaki et al.	
	P	US- 5,503,248	04-02-1996	Peruggi et al.	
	Q	US- 5,509,504	04-23-1996	McHugh et al.	
	R	US- 5,492,273	02-20-1996	Shah	
	S	US- 5,446,645	08-29-1995	Shirahama et al.	
	T	US- 5,350,992	09-27-1994	Colter	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
	U	DE 1004 7629	04-11-2002	Linde AG		
	V	EP 1 055 885 A2	11-29-2000	Sharp Kabushiki Kaisha		
	W	EP 1 022 844 A2	07-26-2000	Matsushita Electric Industrial Co., Ltd.		
	X	WO 97/18420	05-22-1997	JDM, Ltd.		
	Y	EP 0 695 024 A2	01-31-1996	Sharp Kabushiki Kaisha		
	Z	JP 60102878	06-07-1985	Nihon Denki Seiki KK		
	AA	GB 1579045	11-12-1980	Electric Power Res Inst.		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the

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Sheet 2 of 3

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Attorney Docket Number	20712-0090

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AB	MURPHY, J.M.D., "Thyristor Control of A.C. Motors", Principles of Variable-Frequency A.C. Drives, October 10, 1975, pgs 3-4, 111-114, & 120-121, Pergamon Press, New York	

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SignatureDate  
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Sheet 3 of 3

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		Number - Kind Code <sup>2</sup> (if known)			
	AC	US-5,488,279	01-30-1996	Kawamoto et al.	
	AD	US- 5,010,287	04-23-1991	Mukai et al.	
	AE	US- 4,958,118	09-18-1990	Pottebaum	
	AF	US- 4,787,211	11-29-1988	Shaw	
	AG	US- 4,546,423	10-08-1985	Seki	
	AH	US- 4,152,902	05-08-1979	Lush	
	AI	US- 4,151,725	05-01-1979	Kountz et al.	
	AJ	US- 4,150,425	04-17-1979	Nagano et al.	
	AK	US- 3,909,687	09-30-1975	Abbondanti	
	AL	US- 3,621,365	11-16-1971	Beck et al.	
	AM	US- 3,390,320	06-25-1968	Kammiller et al.	
	AN	US- 2003/0041605 A1	03-06-2003	Butcher et al.	
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		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				

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